

In the Title:

Please amend the title as follows:

~~Wireless communication channel selection using passive interference avoidance techniques~~ Summed Interferences In Included Narrow Band Channels Selecting Wide Band Channel

In the Specification:

Please enter the following replacement paragraphs:

[0015] After using passive monitoring techniques such as described above, an active probing technique can be used with respect to each available frequency of any wide band channels that the passive monitoring has identified as acceptable. An example of such an active probing technique is the probe, listen and select (PLS) technique described in copending U.S. Ser. No. 09/777,201 (docket no. TI-31285), filed on Feb. 5, 2001, now US 7,050,402, issued May 23, 2006, incorporated herein by reference. In other embodiments, any desired frequency channel within an acceptable wide band channel can be chosen arbitrarily, without passively or actively monitoring that specific frequency individually.

[0016] FIG. 1 illustrates exemplary operations which can be performed according to the invention. It is determined at 11 whether a new wide band channel should be selected. This decision can be made, for example, in response to unacceptable communication quality in an existing wireless communication link between two devices, or in response to user selection of a communication application that requires, for example, a relatively high transmission quality or a relatively high transmission data rate (for example audio, video or multimedia applications). The decision at 11 can also be received from the other end of the link. When it is determined at 11 that a new channel should be selected, a filter is appropriately tuned to a frequency band that is to be passively monitored, for example a wide band channel associated with a known interfering system, a desired transmission bandwidth, or a narrow band channel that is to be observed in order to obtain

channel quality/interference information about a wider band channel that includes the narrow band channel. After making the desired passive channel quality/interference observations (for example RSSI measurements) at 13, it is determined at 14 whether another band is to be observed. For example, the bands of all or only some possible interferers may be checked. If another band is to be observed, the filter is tuned to that band at 12, and corresponding passive channel quality/interference observations are made at 13. When it is determined at 14 15 that the passive observations have been made on all desired frequency bands, it is then determined at 14 whether the observed frequency bands are narrow bands from which a determination about a wider band is to be made. If not, then passive observations made at the other end of the link are obtained (as received from the other end) at 18, and a wide band channel (or channels) is selected (and reported to the other end of the link) at 19 based on the available passive observation information. Thereafter, operations return to 11.

[0022] A user input signal 30 that is used to select a communication application at 28 is also applied to the band selection controller 29, thereby permitting the band selection controller to determine whether another frequency band should be selected in view of the communication application selected by the user. The band selection controller 29 may also determine that another frequency band should be selected based on information conventionally produced by the wireless communications interface 27 indicative of the communication quality of a currently active frequency channel. The band selection controller 29 receives from the wireless communications interface 27 frequency channel signals received via the antenna 24. The band selection controller 29 performs the ~~above~~^{described}

above described passive monitoring technique to obtain channel quality/interference observations with respect to any selected wide band channel.